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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,674	03/16/2004	Ferdinand Grogl	Q79685	3002

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EXAMINER	
MAYO III, WILLIAM H	
ART UNIT	**PAPER NUMBER**
2831	

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/800,674	GROGL ET AL.
	Examiner	Art Unit
	William H. Mayo III	2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 2, 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 13-15 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (EP Pat Num 0 790 624 A2) in view of Andrieu et al (Pat Num 5,300,337, herein referred to as Andrieu) and Urabe et al (Pat Num 2004/0076824 A1, herein referred to as Urabe). Smith discloses an abrasion resistant jacket (Figs 1-4) for a flexible cable (10) comprising a core (12) and a sheath (16, 18, 20) made of an abrasion resistant thermoplastic material (Col 4, lines 15-23) that surrounds the core (12). Specifically, with respect to claim 13, Smith discloses that the sheath (16 & 20) is made of an inner plastic layer (16) that is capable of being extruded, a braiding (18) over adhering to the inner sheath layer (16, Col 7, lines 35-41) with a visual coverage of 40-70% (i.e. less than 60%, Col 6, lines 28-32), wherein the braiding (18) comprising a braid of plurality of filaments (Col 6, lines 16-22) of a material which is chemical and thermally stable (Cols 5 & 6, lines 53-58 & 1-7) and has an outer plastic layer (20) capable of being pressure extruded, wherein the outer jacket (20) is placed such that the spaces in the layer of monofilaments (18) are nearly filled by the material of the outer jacket layer (20). With respect to claim 14, Smith discloses that the layer of monofilaments (18) may be made of polyamide (Col 5, lines 52-58). With respect to claim 15, Smith discloses that the layer of monofilaments (18) may be polyethersulfone (Col 5, lines 52-58). With respect to claim 18, Smith discloses that the core (12) may comprise a plurality of wires, wherein the wires are embedded in an inner sheath (i.e. insulated conductors, Cols 3 & 4, lines 52-58 & 1-5). With respect to claim19, Smith

discloses that the coverage of the layer of monofilaments (18) may be between 50-65% (i.e. less than 60%, Col 6, lines 28-32). With respect to claim 20, Smith discloses that the jacket (20) may be made of polyurethane (Col 6, lines 39-42).

Smith doesn't necessarily disclose the monofilaments being between 0.15-0.25 mm (claim 13).

Andrieu teaches an abrasion resistant jacket (Figs 1-4), that may be utilized with a cable (Fig 4) and provides protection from the effects of abrasion or heat as well as to maintain the elongated articles such as a cable in a neatly bundled arrangement so that they are not damaged by moving machinery parts or the like (Col 1, lines 10-20). Specifically, with respect to claim 1, Andrieu discloses a jacket (10) comprising a layer of monofilaments (11), wherein the diameter of the monofilaments (11) is typically in the range 0.15-0.25 mm (i.e. 8-15 mils is equal to 0.203-0.381 mm, Col 3, lines 50-51).

With respect to claim 13, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the resistant jacket of Smith to comprise the monofilaments being between 0.15-0.25 mm as taught by Andrieu because Andrieu teaches that such a configuration provides protection from the effects of abrasion or heat as well as to maintain the elongated articles such as a cable in a neatly bundled arrangement so that they are not damaged by moving machinery parts or the like (Col 1, lines 10-20) and since such a modification would have involved a mere change in size of a component and a change of size is generally recognized as being within the ordinary skill in the art. *In re Rose, 105 USPQ 237 (CCPA 1955).*

Smith also doesn't necessarily disclose the monofilaments being containing a fireproofing agent (claim 13).

Urabe teaches flame retardant polyamide filaments being monofilaments are known and have been used to impart flame retardancy to a variety of items (paragraphs 2 & 4), such as an electrical cable (Paragraph 11). Specifically, with respect to claim 13, Urabe teaches that monofilaments containing fireproofing agents are known and are commonly utilized in environments where fire resistant properties are desired, such as electrical cables (Paragraph 11).

With respect to claim 12, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the protective jacket of Smith to comprise the monofilaments to be fire resistant as taught by Urabe because Urabe teaches that such monofilaments containing fireproofing agents are known and are commonly utilized in environments where fire resistant properties are desired, such as electrical cables (Paragraph 11) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416..

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (EP Pat Num 0 790 624 A2) in view of Andrieu (Pat Num 5,300,337) and Urabe et al (Pat Num 2004/0076824 A1, herein referred to as modified Smith), as applied to claim 13 above, further in view of Middleton et al (Pat Num 1,698,704, herein referred to as Middleton). Modified Smith discloses an abrasion resistant jacket (Figs 1-4) for a flexible cable (10) comprising a core (12) and a jacket (16, 18, 20) made of an abrasion

resistant thermoplastic material (Col 4, lines 15-23) that surrounds the core (12) as disclosed above with reference to claim 13.

However, modified Smith doesn't necessarily teach a cable comprising a metal braided shield, wherein a separation layer of non-woven material or plastic foil is placed between the braided shield and the layer of monofilaments (claim 16).

Middleton teaches an abrasion resistant jacket (Figs 1-3) for a flexible cable (Fig 1) comprising a core (1-3) and a jacket (8 & 9) made of an abrasion resistant thermoplastic material (Page 3, lines 43-63) that surrounds the core (1-3), which further comprises a metal braided shield for the purpose of preventing passage of electrostatic stress and providing desired flexibility to the cable (Page 3, lines 16-24). Specifically, with respect to claim 16, Middleton teaches that the jacket (8 & 9) is made of an inner jacket layer (6) that is capable of being extruded and an outer jacket layer (9) capable of being pressure extruded, wherein a layer of monofilaments (7) of a chemical and thermally stable material (Page 3, lines 89-95) is placed between the inner jacket layer (8) and the outer jacket layer (9), wherein the outer jacket (9) is placed such that the spaces in the layer of monofilaments (7) are nearly filled by the material of the outer jacket layer (9) and the layer of monofilaments adheres to the inner sheath layer (6, Page 3, lines 43-59), wherein the cable (Fig 1) further comprises a metal braided shield (5), wherein a separation layer (6) of non-woven material or a plastic foil is placed between the braided shield (5) and the layer of monofilaments (7, Fig 1).

With respect to claim 16, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the cable of modified

Smith to comprise a metal braided shield, wherein a separation layer of non woven material or plastic foil is placed between the braided shield and the layer of monofilaments as taught by Middleton because Middleton teaches that such a configuration prevents passage of electrostatic stress and provides desired flexibility to the cable (Page 3, lines 16-24).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (EP Pat Num 0 790 624 A2) in view of Andrieu (Pat Num 5,300,337), Urabe et al (Pat Num 2004/0076824 A1, herein referred to as Urabe), and Middleton (Pat Num 1,698,704, herein referred to as Modified Smith2), as applied to claim 16 above, further in view of Jachimowicz (Pat Num 3,711,621). Modified Smith discloses an abrasion resistant jacket (Figs 1-4) for a flexible cable (10) comprising a core (12) and a jacket (16, 18, 20) made of an abrasion resistant thermoplastic material (Col 4, lines 15-23) that surrounds the core (12) as disclosed above with reference to claim 16.

However, modified Smith2 doesn't specifically disclose the plastic layer comprising a powder that swells in the presence of moisture (claim 17).

Jachimowicz teaches an improved cable construction for preventing migration of water along the length of the cable (Figs 1-5) in the event that the jacket layer is ruptured (Col 1, lines 55-65). Specifically, with respect to claim 17, Jachmiowicz teaches a cable (Fig 1) comprising a core (10) surrounded by an inner sheath (14) and an outer sheath (24), wherein a dry powder (30) which are known in the art (Cols 3-4, lines 64-68 & 1-15), may be placed in various areas of the cable (Fig 1) to prevent the

migration of water, wherein the dry powder (30) swells in the presence of moisture (Cols 3-4, lines 64-68 & 1-15).

With respect to claim 17, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the jacket of modified Smith2 to comprise the plastic foil layer having a powder that swells in the presence of water configuration as taught by Jachimowicz because Jachimowicz teaches that such a configuration is known in the art of cables for being an improved cable construction for preventing migration of water along the length of the cable (Figs 1-5) in the event that the jacket layer is ruptured (Col 1, lines 55-65) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Response to Arguments

Applicant arguments filed March 2, 2006 do not address the prior art rejections and therefore there are no rebuttals.

Communication

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
March 2, 2006